

## HARDWARE ASSISTED ASSEMBLY CODE DEBUGGING

### Abstract

An embodiment for hardware assisted assembly code debugging uses

- 5   configurable data bits to enable breakpoint and single-stepping debugging. One of the data bits is included in the data bits defining a computer program instruction op-code and is configurable to halt execution of the instruction by a processing element. Other of the data bits are held in a control register coupled to the processing element and are configurable to halt both execution of individual
- 10   instructions and to consecutively halt execution of multiple instructions.